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4. The method of claim 3, wherein the first result drives the output signal from the previous logical state toward the first result; and generating a control signal includes comparing the oscillating reference and the output signal while the output signal is still logically equal to the previous logical state.

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9. The method of claim 1, further comprising:

obtaining an oscillating reference complement; and comparing the complement against the incoming signal and against the previous logical state to detect a transition in the incoming signal relative to the previous logical state.

14. The system of claim 12, wherein the first result is coupled to the output terminal to drive the output signal from the previous logical state toward the first result; and the first controller is coupled to compare the oscillating reference and the output signal after the output signal logically equals the first result.

19. The system of claim 11, further comprising

a third input terminal for receiving an oscillating reference complement;

a second comparator coupled to the second and third input terminals for comparing the complement and the incoming signal to generate a second result; and

a second controller coupled to the second comparator for coupling the second comparator to the output terminal based on the previous logical state.

20. A method of comparing an incoming signal to a previous logical state, comprising the steps of:

obtaining an oscillating reference and an oscillating reference complement, the oscillating reference complement being a complement of the oscillating reference;

receiving the incoming signal;

comparing by a first comparator the oscillating reference against the incoming signal to generate a first result;

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comparing by a second comparator the oscillating reference complement against the incoming signal to generate a second result;

using a control signal based on the previous logical state to control whether the first result or the second result passes as an output signal.

The method of claim 20, wherein the previous logical state previously 22. strove the output signal via the first comparator; the incoming signal is logically opposite the previous logical state; and the control signal allows the first result to pass as the output signal.

A receiver comprising: 23.

a first comparator for comparing an oscillating reference and a new signal:

a second comparator for comparing a complement of the oscillating reference and the new signal;

an output terminal coupled to one of the first and second comparators;

circuitry for maintaining the comparator that is coupled to the output terminal coupled to the output ferminal when the new signal transitions; and

circuitry for coupling the other comparator to the output terminal and decoupling the coupled comparator from the output terminal when the new signal does not transition.

25. The method of claim 24, wherein the small-swing signals swing approximately 0.5 volts.

The system of claim 26, wherein the small-swing signals swing 27. approximately 0.5 volts.

## **REMARKS**

Claims 1-27 remain in the application. Claims 1, 4, 9, 14, 19-20, 22-23, 25, and 27 have been amended to more distinctly claim the invention and/or to correct typographical errors. No new matter has been added.